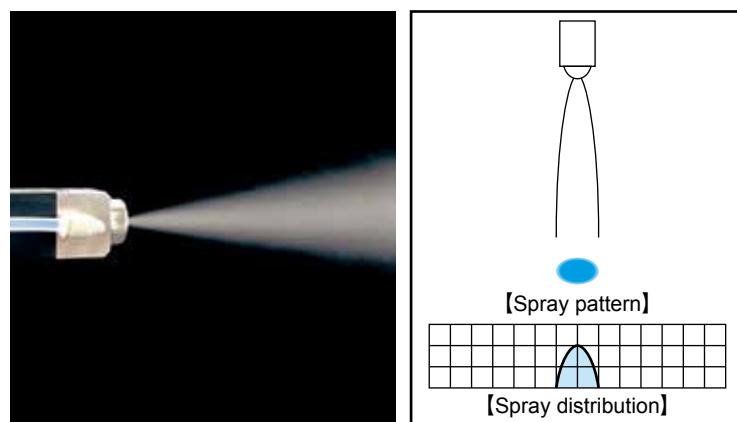


Solenoid-activated Spray Nozzles

SETO-SD

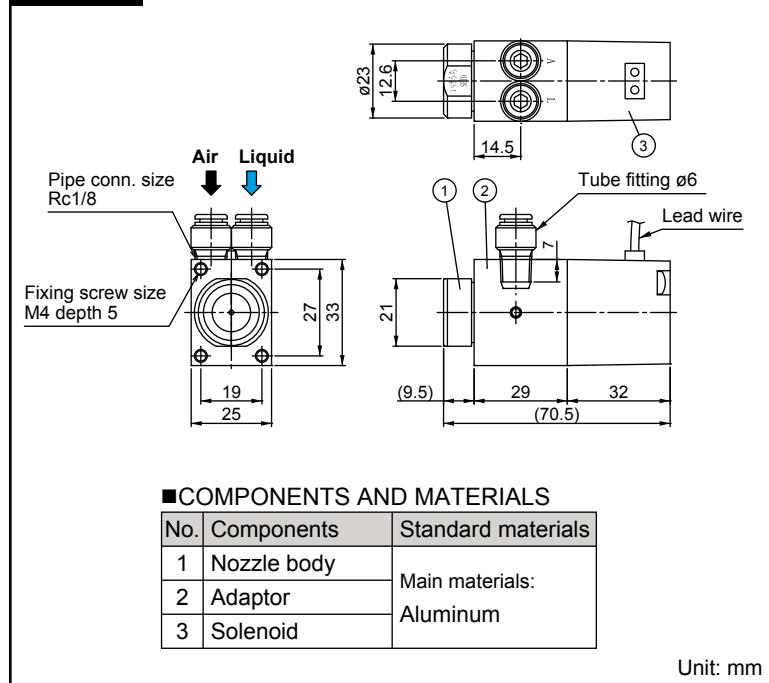


- Fast response performance by solenoid activation: Intermittent pulse spray at 0.02 sec/shot with a minimum of 0.006 cc/shot is possible.
- Ideal for coating in small amounts, i.e. protective agent coating, etc.
- IP65, IP67 (dust-proof and water-proof) structure.
- SETO07503R-I+SD is an internal mixing outer air type (the other SETO models are external mixing type).

APPLICATIONS

- Spraying release agent for metal molds
- Coating
- Mold cooling
- Uniform coating without dripping

DRAWING

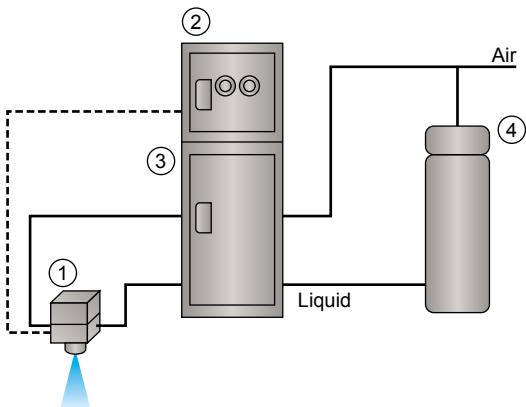


■ COMPONENTS AND MATERIALS

No.	Components	Standard materials
1	Nozzle body	Main materials: Aluminum
2	Adaptor	
3	Solenoid	

Unit: mm

HOW TO USE



No.	Description	
1	Solenoid-activated pneumatic spray nozzle	
2	Solenoid control panel	
3	Pressurized flow control unit	
4	Liquid pressurization tank (required only if oil-based release agent is used)	

PERFORMANCE DATA

Nozzle code	Air pressure (MPa)	Spray capacity (L/hr) & Air consumption (L/min, Normal)					Spray width*2 (mm)	Mean droplet diameter*3 (µm)	Free passage diameter (mm)	Mass (g)		
		Liquid pressure (MPa)							Laser Doppler method			
		0 *1	0.05	0.13	0.2	0.3			Adaptor			
	Liquid Air	Liquid Air	Liquid Air	Liquid Air	Liquid Air	Liquid Air			Liquid Air			
07503R-I	0.2	— —	— —	1.0 50	3.2 48	— —	40–50	15–25	0.3 0.4	180	Aluminum	
	0.3	— —	— —	— —	0.9 66	4.0 64						
	0.4	— —	— —	— —	— —	1.9 80						
0405R	0.3	2.0 36	6.5 36	— —	— —	— —	Aluminum	0.5 0.1	0.7 0.2	180		
07507R	0.3	5.0 71	13.9 71	— —	— —	— —						
2210R	0.3	10.0 200	26.4 200	— —	— —	— —						

*1) Spray capacity and air consumption at liquid pressure of 0 MPa (liquid siphon feed) are measured at 100 mm siphon height.

*2) Spray width measured at 100 mm from nozzle.

*3) 07503R-I: Sauter mean diameters measured at compressed air pressure of 0.2 MPa and liquid pressure of 0.13 MPa.

0405R, 07507R, 2210R: Sauter mean diameters measured at compressed air pressure of 0.3 MPa and liquid pressure of 0 MPa (siphon height of 100 mm).

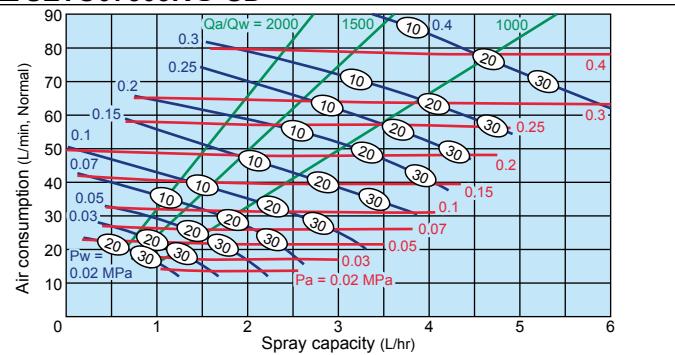
Valve function	Min. operating time (sec)	Max. operating pressure (MPa)	Electric current (A)	Electric voltage (DC-V)	Max. allowable temperature
Single solenoid, normally closed	ON: 0.02 OFF: 0.02	0.5 for both air/liquid	0.26	24	50°C (120°F)

FLOW-RATE DIAGRAMS

■ How to read the chart

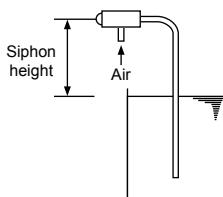
1. The spray capacity shown is for one nozzle.
2. Red lines (—) represent compressed air pressures P_a in MPa.
3. Blue lines (—) represent liquid pressures P_w in MPa.
4. Green lines (—) represent air-water ratio Q_a/Q_w .
5. Figures in ovals (○) indicate Sauter mean diameters (μm) measured by laser Doppler method (measured at 300 mm from the nozzle).

■ SETO07503R-I+SD

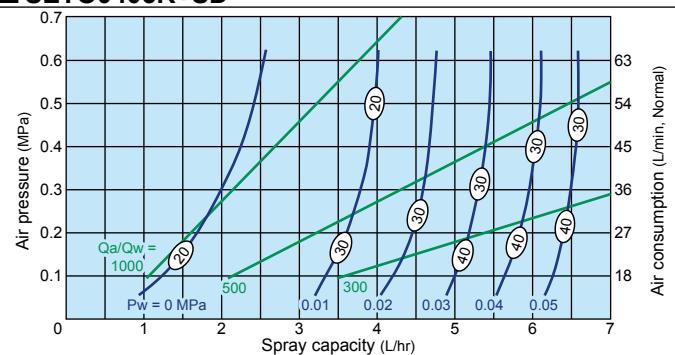


■ How to read the chart

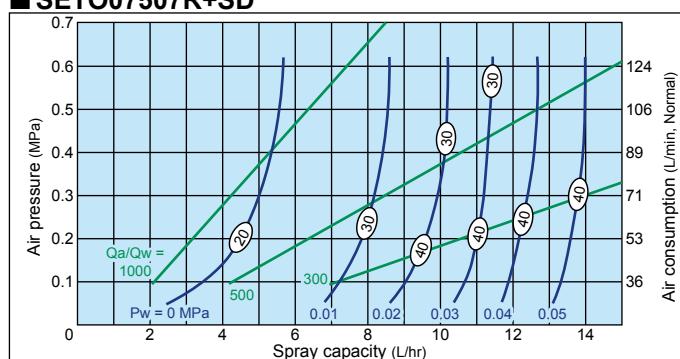
1. The spray capacity shown is for one nozzle.
2. Blue lines (—) represent liquid pressures P_w in MPa.
3. Green lines (—) represent air-water ratio Q_a/Q_w .
4. Measured at liquid siphon height of 100 mm when P_w is 0 MPa.
5. Figures in ovals (○) indicate Sauter mean diameters (μm) measured by laser Doppler method (measured at 300 mm from the nozzle).



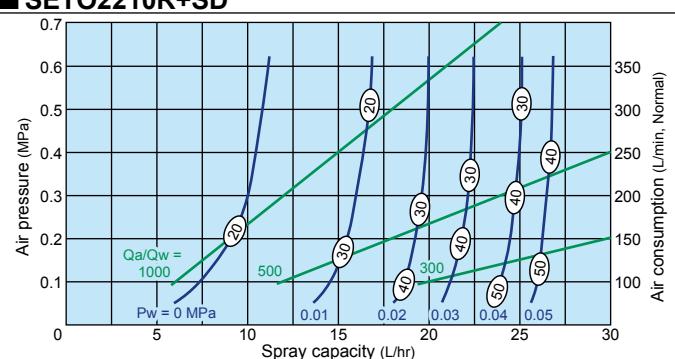
■ SETO0405R+SD



■ SETO07507R+SD



■ SETO2210R+SD



HOW TO ORDER

Please inquire or order for a specific nozzle using this coding system.

<Example> SETO 07503R-I +SD AL

SETO

07503R-I

+ SD

AL

Nozzle code

■07503R-I

■0405R

■07507R

■2210R

Material

■AL (Aluminum)